

Older Mentally Ill Inmates: A Descriptive Study

Steven J. Caverley, LCSW

This article describes the mentally ill inmate population aged 50 years and older at the Utah State Prison and addresses related financial and policy issues. Prevalence of serious mental illness was 13.6% versus 15.5% among younger inmates. Of the older mentally ill inmates, 57% had a primary diagnosis of depression, 25% schizophrenia, and 18% bipolar disorder. Schizophrenia spectrum disorders were seen in 3% of the older population, exceeding the incidence in seniors in the community. The rate of atypical antipsychotic medication use in older mentally ill inmates was 33% versus 23% for younger inmates. The majority of older mentally ill inmates required sheltered or specialized mental health housing. These findings suggest future challenges to prison administrators as Utah's aging inmate population increases. Near term, however, the impact will not be marked because older mentally ill inmates represented less than 1% of the population, and Utah's sentencing structure allows for a balance between older inmate intakes and releases.

Keywords: mental illness; aging prisoners; correctional health care

The demographic trends of older adults observed in "free world" society are reflected in the microcosm of prison. The higher prevalence of mental illness occurring in older adults, particularly depression, and the increasing percentage of older adults in the population are two trends that converge in prison, creating a growing number of older adults with mental health problems. The morbidity for medical disorders in older prison inmates has received increasing attention by state correctional authorities, largely because of the higher costs of incarceration for this group, which can be 2 to 3 times the cost of younger inmates (Florida House of Representatives, Criminal Justice & Corrections Council, Committee on Corrections, 1999). The morbidity for mental illness in the aging inmate population has commanded relatively less attention. How does the prevalence of mental illness in the aging inmate population compare to that of younger inmates? Are aging inmates overrepresented in their use of mental health services? Do they account for a greater proportion of psychotropic drug costs, which constitute one of the most rapidly accelerating expenditures for correctional health care systems? The purpose of this article is to describe the aging and mentally ill inmate population at the Utah State Prison and to address these questions.

From the Bureau of Clinical Services, Utah Department of Corrections, Draper.

Address correspondence to: Steven J. Caverley, LCSW, Bureau of Clinical Services, Utah Department of Corrections, P.O. Box 250, Draper, UT 84020; e-mail: scaverley@utah.gov.

Background

The Aged in Prison

The growing populations of aging inmates are having a serious fiscal impact, largely attributable to soaring medical costs, on the nation's penal systems. As a result, medical-economic issues concerning older inmates have become a topic of intense interest with an associated body of literature.

In 2002, 121,000 older inmates (aged 50 years and older) were incarcerated in federal and state prisons, more than twice as many as 10 years earlier, according to U.S. Justice Department statistics (Harrison & Beck, 2004). The average annual cost to house an inmate older than 60 years is \$70,000, which is about 3 times the cost to house an average inmate, \$20,000 to \$25,000, as reported by the Council of State Governments (Kinsella, 2004). In some states, the increase in the aging inmate population has been significant. In Florida, for example, the inmate population 50 and older increased by 377% from 1982 to 1999 and by 348% for the population older than 60 years, whereas the overall prison population increased only 157% during the same time period (Florida House of Representatives, Criminal Justice & Corrections Council, Committee on Corrections, 1999). In New York, the percentage of inmates older than 50 years doubled from 1991 to 2001 (Adams & Reynolds, 2002).

Between 1995 and 2003, the number of inmates older than 55 years nationwide rose from 32,600 to 60,300, for a growth rate of 85%. Interestingly, the second greatest growth rate, 76.5%, was in the number of inmates aged 45 to 54, which rose from 108,100 to 190,800 (Harrison & Beck, 2004).

Older inmates account for significantly higher medical costs than younger inmates, with treatment needed for hypertension, hypercholesterolemia, diabetes, emphysema, dementia, and other chronic conditions. A Georgia Department of Corrections report (Owens & Phillips, 2003) indicated that only 31% of the older inmates surveyed could be classified as having no physical limitations, as compared to 83% in the 15- to 29-year cohort. Forty percent of the older inmates were classified as having major or very major physical defects.

Less is known of older inmates with morbidity for serious psychiatric disorders, their numbers, and the relative impact their care may have on medical costs.

Aging and Mental Illness in Prison

Although we have reliable estimates of the prevalence of serious mental illness in the general incarcerated population, less is known about the incidence of serious mental illness among aging prison inmates. It has been estimated that nationwide, 16% of inmates (all ages) suffer from some form of mental illness (Ditton, 1999).

The prevalence of serious mental illness among older adults in the community population is fairly well defined, falling in the 15% to 20% range, according to *Mental Health: A Report of the Surgeon General* (U.S. Department of Health and Human Services, 1999).

Fazel, Hope, O'Donnell, and Jacoby (2004) surveyed the prevalence of psychiatric morbidity in 102 sex offenders aged 59 and older. About 13% were diagnosed with either a psychotic disorder (6%) or a major depressive episode, with about one third identified as personality disorders. A study by the same researchers in 2004 analyzed the prevalence in 203 prisoners in the same age range and determined that more than half had a psychiatric diagnosis. The majority were diagnosed with a depressive disorder or personality disorder, which the researchers concluded was 5 times the rate encountered in younger inmates. A

2006 study of 671 prisoners aged 55 and older at the Tennessee State Prison (Regan, Alderson, & Regan, 2002) examined the differences in characteristics between those diagnosed as mentally ill and those who were not. They found that 16% of the older inmates were mentally ill and that gender, crime, and the diagnoses of dementia or depression were correlated.

There are age-related changes and conditions specific to confinement that would be likely to influence the mental health of aging inmates. The fear of dying in prison and of falling victim to pain and disability are heightened. Limited physical strength and the lessened ability to defend oneself against younger, predatory inmates is a worry for many. The death of relatives, friends, and other older inmate companions may create a sense of increasing interpersonal isolation. Apprehension about becoming helpless and the loss of independence may arise from the declining health and premature aging that many older inmates experience. Finally, there is the fear of release from prison: how to locate housing and support oneself financially, how to secure medical care, and how to reintegrate into a fast-paced society that has been moving forward as the inmate has stood still.

Yet the connection between these predisposing factors and psychiatric disorders in older prisoners is not well understood, even though, on the face of it, one would expect a higher morbidity in older prisoners for serious mental illness when compared to younger inmates or to community-dwelling seniors.

Aging and Mentally Ill Inmates in Utah

Prevalence

In February 2005, 360 inmates in the Utah State Prison were 50 years of age or older. This group constituted about 6% of the total prison population of 5,700. Of these older inmates, 42 were female and 318 were male. The oldest woman was 73 years old, and the oldest man was 96.

Inmates at the Utah State Prison have access to mental health services through a number of means, including self-referral, referral by corrections staff, and referral from clinical staff. Upon arrival at the prison, all inmates are screened for mental illness through the medical intake screening conducted by nursing staff as part of the receiving and orientation procedure. When a mental health concern is detected during this initial screening, the inmate is referred to a licensed mental health professional, who will conduct an in-depth interview, obtain and review psychiatric records, and administer the Symptom Checklist-90 (Pearson Assessments). Further testing, referral to a psychiatrist for a medication evaluation, referral to the prison's infirmary or forensic unit, or referral to counseling services may occur.

The criteria by which *mentally ill* is defined for this study is actually serious mental illness, which includes primarily schizophrenia, other psychoses, depressive disorders, and bipolar spectrum disorders, excluding personality and substance abuse disorders. For the purposes of this study, only older inmates prescribed psychotropic medications were considered to be seriously mentally ill.

A review of prison medical records revealed that 15.5% ($n = 884$) of the total inmate population was identified as mentally ill at the time of the study (Figure 1). By age group, 835 of the mentally ill inmates were younger than 50 years (14.7% of the prison's total population, 94.4% of its mentally ill population) and 49 were aged 50 or older (0.8% and 5.6%, respectively). Looked at another way, these older mentally ill inmates made up 13.6% of all inmates in their age group. These figures indicate that mental illness prevalence in the older age group is lower compared to the younger group and to the inmate population as a whole, by 1.1% and 1.9%, respectively.



Figure 1. Mentally ill inmates by age group.

This finding appears to fall well within prevalence estimates for seniors diagnosed with mental illness in the community. By comparison, the Florida Department of Corrections reported that 9.4% of their inmates older than 50 years were graded psychologically as moderately to severely impaired due to mental illness (Correctional Medical Authority, 2000).

Of the 49 older mentally ill inmates at Utah State Prison, 45 were men and 4 were women. The majority (34 inmates) were in their early to mid-50s. Only 15 inmates were aged 55 or older, and of these, only 2 were older than 60 years, with the oldest being 65 years.

Prison Housing for Older Mentally Ill Inmates

The largest group of older mentally ill inmates, 18 (37%), resided in the prison's Olympus Forensic Facility, a freestanding psychiatric unit that houses 147 mentally ill inmates of all ages and has a 20-bed unit for women. Overall, about 12% of all older inmates occupied beds in Olympus.

Nine older mentally ill inmates resided in Oquirrh 5, a dormitory facility set aside for infirm, older, or weaker inmates who might be victimized if they were placed in the general population of the prison.

Interestingly, 4 of the older mentally ill inmates were housed in Uinta 1, a "supermax" facility. Inmates are placed in this administrative segregation for a number of reasons: widespread safety issues that preclude them living with the general population, notoriety from the high-profile nature of their crime, disciplinary problems and violent behavior, and a death penalty sentence.

All but 1 of the older female inmates with mental illness were housed in Timpanogos 4, which is one of three units in the women's prison and is considered medium security.

Diagnostic Categories

Not surprisingly, the most common primary psychiatric diagnosis among the older mentally ill inmates in this study was depression, with 28 (57%) suffering from a depressive disorder.

Twelve (24%) were diagnosed with a psychosis or schizophrenia spectrum disorder, and the remaining 9 inmates (18%) were diagnosed with a bipolar disorder.

In the general population, the schizophrenia rate for all ages is 1%, according to the National Institute of Mental Health (2006). The 1-year prevalence rate per 100,000 in those aged 65 and older was found to be 0.3% in the Epidemiological Catchment Area study (Cohen, 2000). In that same study, best-estimate 1-year prevalence rates for those aged 55 and older were reported as 0.6% (U.S. Department of Health and Human Services, 1999). Furthermore, hospitalization rates for schizophrenia in the 50- to 60-year age group are close to 150 per 100,000 (0.15%), according to some estimates (Public Health Agency of Canada, 2002).

By contrast, 2.5% of the inmate population older than 50 years in this study had a schizophrenia spectrum disorder, a rate that exceeds rates among older adults in the community by as much as fourfold. This higher concentration of older inmates with schizophrenia may be a consequence of the transfer of care for the chronically mentally ill from community-based psychiatric institutions and programs to prisons, which have become the major providers of mental health treatment to the persistently mentally ill who commit criminal offenses.

Psychiatric Medications

Twenty-nine of the older mentally ill inmates (59%) were receiving at least one antidepressant medication: Paxil, Wellbutrin, Zoloft, Effexor, or Prozac. Sixteen (33%) were receiving an atypical antipsychotic: Zyprexa, Risperdal, Seroquel, or Geodon. One inmate was prescribed the typical antipsychotic Haldol. Ten inmates were prescribed mood-stabilizing medications: Depakote, Lithium, or Tegretol. Sixteen were receiving at least two medications; of these inmates, 5 were receiving three or more medications, and 1 inmate was prescribed four. Appropriately, the majority of inmates on atypical antipsychotics and multiple medications were treated in the Olympus Forensic Facility and carried diagnoses of schizophrenia, schizoaffective disorder, or bipolar disorder. The 33% age group rate of atypical antipsychotic use in these older inmates was far higher than the 23% seen in the mentally ill inmate population younger than 50.

Because the atypicals are by far the most expensive psychotropics found in prison formularies, this finding would be of economic interest. However, the small number of older inmates on atypical antipsychotic medications in absolute terms moderates the impact on pharmaceutical costs, at least for the present.

Conclusions

Mentally ill inmates older than the age of 50 years at the Utah State Prison suffer a rate of serious mental illness slightly lower than that of younger inmates, although these rates, except for schizophrenia spectrum disorders, are well within those seen among older adults in the community. The incidence of schizophrenia for older inmates in this study is higher than the rate for community-dwelling older adults found in other studies. However, it is difficult to make accurate comparisons because of the age differences in the studies (i.e., 50 years in prison, 55 and 65 years in the community) and the small number of participants in the present study.

The majority of older mentally ill inmates resided in the Olympus Forensic Facility and the Oquirrh 5 dormitory, which indicates a degree of impairment severe enough to preclude them from living in the prison's general population. Finally, the older inmates tended to

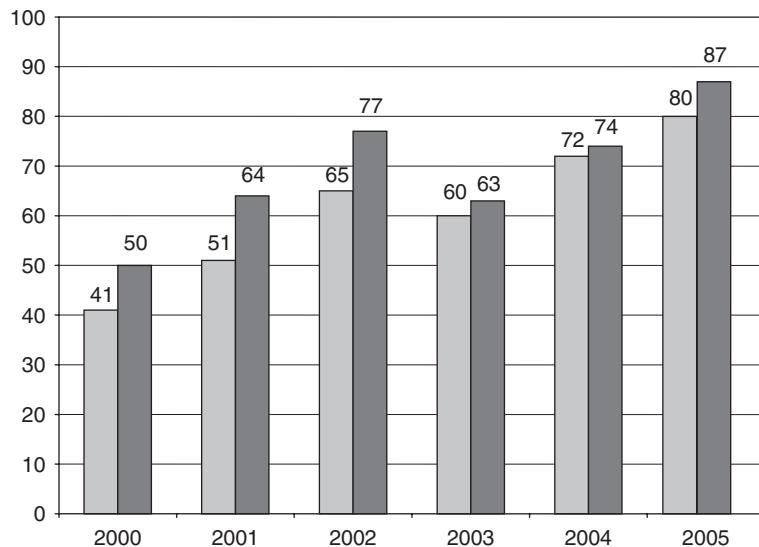


Figure 2. Older inmate intakes and releases. Intakes = gray; releases = black.

require therapy with atypical antipsychotics at a rate that exceeds by 10% the rate in younger mentally ill inmates.

Prison admission rates for inmates age 55 years and older in Utah are expected to increase at 19% per year through 2010 if trends remain consistent with 2000 through 2005 rates (Figure 2). However, Utah employs an indeterminate sentencing structure that has enabled the state to maintain a rate of older inmate releases slightly above the number of intakes, and it is projected that this will limit the growth of the older inmate population in Utah.

The study findings suggest that many older mentally ill inmates may need forensic facility placement (which is more resource intensive and costly than general housing) and that higher utilization of expensive atypical antipsychotics and multiple drug regimes is to be expected. However, because the older mentally ill population is less than 1% of the total inmate census now and, except for schizophrenia, does not disproportionately suffer from serious psychiatric disorders, it seems unlikely that the resource demands for older mentally ill inmates over the next 5 years will have a marked impact on the Utah Department of Corrections.

References

- Adams, D. B., & Reynolds, L. E. (2002). *Bureau of Justice Statistics 2002: At a glance* (Bureau of Justice Statistics Report NCJ 194449). Washington, DC: U.S. Department of Justice.
- Cohen, C. I. (2000). Practical geriatrics: Directions for research and policy on schizophrenia and older adults: Summary of the GAP committee report. *Psychiatric Services*, 51, 299-302.
- Correctional Medical Authority. (2000). *Annual report of the CMA—Incarcerating elderly and aging inmates: Medical and mental health implications*. Tallahassee, FL: Author.
- Ditton, P. M. (1999). *Mental health and treatment of inmates and prisoners* (Bureau of Justice Statistics Special Report). Washington, DC: U.S. Department of Justice.

- Fazel, S., Hope, T., O'Donnell, I., & Jacoby, R. (2004). Unmet treatment needs of older prisoners: A primary care survey. *Age and Ageing*, 33, 396-398.
- Florida House of Representatives, Criminal Justice & Corrections Council, Committee on Corrections. (1999). *An examination of elder inmates services: An aging crisis*. Tallahassee, FL: Author.
- Harrison, P. M., & Beck, A. J. (2004). *Prisoners in 2003* (Bureau of Justice Statistics Bulletin NCJ 205335). Washington, DC: U.S. Department of Justice.
- Kinsella, C. (2004). *Trends alert: Corrections health care costs*. Lexington, KY: Council of State Governments.
- National Institute of Mental Health. (2006). *The numbers count: Mental disorders in America* (Fact Sheet, NIH Publication No. 06-4584, Rev. ed.). Retrieved from www.nimh.nih.gov/publicat/numbers.cfm
- Owens, B., & Phillips, N. (2003). *Georgia aging inmate population: An analysis of historic trends and projection of the future population*. Atlanta: Office of Planning and Analysis, Georgia Department of Corrections.
- Public Health Agency of Canada. (2002). *A report on mental illnesses in Canada*. Ottawa, Canada: Author. Retrieved from <http://www.phac-aspc.gc.ca/publicat/miic-mmac/>
- Regan, J. J., Alderson, A., & Regan, W. M. (2002). Psychiatric disorders in aging prisoners. *Clinical Gerontologist*, 26, 117-124.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the surgeon general*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health. Retrieved from <http://www.surgeongeneral.gov/library/mentalhealth>